

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6900370 B2
APPLICATION NO. : 09/749,601
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INVENTOR(S) : NICOLAIDES, NICHOLAS C.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The drawing sheet, consisting of Figs. 1, should be deleted to be replaced with the drawing sheet, consisting of Figs. 1A, 1B, 1C, as shown on the attached pages.

UNITED STATES PATENT AND TRADEMARK OFFICE
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SN. 09/749,601

PATENT NO.: 6,900,370 *B2*

Issue
DATED: May 31, 2005

INVENTOR(S): Nicholas C. NICOLAIDES et al.

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 2, Line 60:

Please delete "SEQ ID NO: 14" and insert -- SEQ ID NO: 12-- .

In Column 2, Line 63:

Please delete "SEQ ID NO: 16" and insert -- SEQ ID NO: 14-- .

In Column 2, Line 67:

Please delete "SEQ ID NO: 14" and insert -- SEQ ID NO: 12-- .

In Column 3, Line 3:

Please delete "SEQ ID NO: 16" and insert -- SEQ ID NO: 14-- .

In Column 3, Line 16:

Please delete "Fig. 1" and insert --Fig 1A, Fig 1B and Fig 1C."--.

NO - In the Drawings, Sheet 1 of 13

~~Please delete Fig. 1 and insert Fig 1A, Fig 1B and Fig 1C (seen below)~~

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U.S. PAT. NO. —
6,900,370

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		1	
humPMS2	(1)	ATCGAGCGACCTGAGAGCTCGAGTACAGAACCTGCTAAGGCC-----	70
AtPMS2	(1)	ATCGAGGAGATTCTCTCGTCTCGACGACTACTAGCTCTCTTGATAAGACCTATAAACACAAACG	
Consensus	(1)	ATG A GAG T CG T C CT CTA C AT A ACCTAT A G AA	
		71	
humPMS2	(65)	CACTCCATCAGATTTGCTCTGGCACTGGTACTGAGTCCTAACGACTGCGGTAAGGAGTTAGTAGAAA	140
AtPMS2	(71)	TAATTACAGAATCTGTTGGTCAACTCATCTAGACCTCTCTCGGCGTCAGAGAGCTGTGAGAA	
Consensus	(71)	AT T CA AT TG TC GG CA GT T T CT C GC GT AAGGAG T GT GA AA	
		141	
humPMS2	(135)	CAGTCTGGATGCTGGTGCACATAATTTGATCATAAGCTTAAGGACTATGGAGTGGACTTATTGAGTT	210
AtPMS2	(141)	TAGTCTCGACGCCGCCACAGATAGAGAATTACCTCCGAGACTACGGCGAAGACTATTTCAGGTC	
Consensus	(141)	AGTCT GA GC GG GCCAC A TAT GA T AA CT GACTA GG G GA T TT A GT	
		211	
humPMS2	(205)	TCA GACAATGGATGTGGGCT-----AGAAGAAG-----AAAATCGAAG-----C	280
AtPMS2	(211)	ATGACAATGGATGTGGCAATTCCCCAACCAATTCAAGGTTGTGTCAAATTCTCGAAGAACTTTTG	
Consensus	(211)	GACAATGG TGTGG T A AAG AA CT CGAAG	
		281	
humPMS2	(246)	CTTAACCT---CTGAAACATCACACATCTAACATGATCAGAGTTGCCGACCTAACCTAGTTGAA-ACCT	350
AtPMS2	(281)	ATGTTCTTGCACTTAAGCATCATACTCTAAATTAGAGGTTTCACAGATCTT-TCATTTGACTACTT	
Consensus	(281)	T CT CT AA CATCA AC TCTAA T A GA TT C GA CT T A TTGA ACTT	
		351	
humPMS2	(311)	TTGGCTTTCGGGGGAAGGCTGAGCTCACTTGTGCACTGAGCGATGTCACCAATTCTACTCT---CCAC	420
AtPMS2	(350)	ATGGTTTACAGGGAGAAGGCTTGAGCTCTCTGTCATGGAAATCTACTGTTGAAACAAACAAACAAA	
Consensus	(351)	TGG TTT G GG GAAGC TGAGCTC CT TGTGCA TG G AT TCAC T AC G C A	
		421	
humPMS2	(379)	GCATCGGCAGAGTGGAACTCGACTGATGTTGATCAATGGAAAATTATCCAGGAACTTACCTGTCGGCCATAGGAAT	490
AtPMS2	(420)	GAATGAGCCA-GTTGCTAGCTCTTGACGTTGATCATTGTTGCTACTGCTGAAAGACTG	
Consensus	(421)	G AT GC A GTTG AC C TGA GTTTGATCA TGG TTA T C GAAA	
		491	
humPMS2	(448)	CCCAGCCCAAGGGGACCAAGTCAGGTGCAGCAGTTTCCACACTACCTGTGGCCATAGGAAT	560
AtPMS2	(488)	CTG-GCCAAATTGGTACCACTGTCACTGTTAGGAGTTGTCCTAATTACCTGTACGAAGCAGAAAGACT	
Consensus	(491)	C C GCC A GG ACCAC GTCA GT G AGTT TT TC A TACCTGT CG AA GA T	
		561	
humPMS2	(518)	TTCAAGGAATATTAAAGAGGATATGCCAAATGGTCAGGTCTTACATGCATACTGTATCATTTCAGC	630
AtPMS2	(557)	TTAAGCGGAATATACGCAAGAATATGGAAAGCTGTATCTTATTGAAACGCTATGCGCTTATTGCGAA	
Consensus	(561)	TT A GGAATAT AA GA TATG AA T GT T TT A GCATA T ATT C	
		631	
humPMS2	(588)	AGGCATCCGTCAAGTTGCAACATCGCTGGACAAGGAAACGACACCCCTGTGGATGCAACAGCTGGA	700
AtPMS2	(627)	AGGAGTGGGTCTGCTCTAACACGACTGGAA---AACCCAAAGTCTGTTGT-----GCTGA	
Consensus	(631)	AGG T CG T TGC C AA G TGG AA AA C A AG CTGT GT G GA	
		701	
humPMS2	(658)	AGCCCAGCATAAAGGAAATATCGGCTCTGTGTTTGGCAGAAGCAGTTGCAAAGCCTCATTCTTTTG	770
AtPMS2	(686)	A---CA-CAGAA-GGGA-----G-GG-----G	
Consensus	(701)	A CA CA AA GG A G G	
		771	
humPMS2	(728)	TTCTAGCTGCCCTAGTGAATCCGTTGTAACGGTTGAGCTGTTGGATGCTCTGCATAATCT	840
AtPMS2	(702)	TTCA-----CT-TAAAGA-TAA-----ATCAACAGCTTT-----TCGGCATAGTA	
Consensus	(771)	TTCA C TA GA T A A AC GTTT TC GCAT A	
		841	
humPMS2	(798)	TTTTACATCTAGGTTCTTACAATGCCACATGGAGTTGGAAACGAGTTCAACAGACAGACAGTT	910
AtPMS2	(743)	CCCTTACAAGTC-----TACA-GCCTGGTACTGGACCAATTAGCAGATCGACAGAT	
Consensus	(841)	TTTACA TC T CA GC TGG TGG G A TT A CAGA GACAGT T	
		911	
humPMS2	(868)	TTCTTATCAACGGCGGCCCTGTGACCCAGAAAGCTGCGAACACTGTTGAATGAGCTTACACATGT	980
AtPMS2	(796)	TTCTTATAATGGTCGGCTGTAGATATGCCAAAGTCAGCAAGTGGTAATGACTTATAT-AAGAT	
Consensus	(911)	TTCTTAT AA G CGGCCT GA CAAA GTC GCA T GTGAATGAG T TA A A T	
		981	
humPMS2	(938)	ATAA-TCGACACCACTATCCATTGTTGTTCTTAACATTCTGTTGATTCACAATGCGTTGATAATCAATG	1050
AtPMS2	(865)	ACAAGTTCTCGAAATATCCAGTTACCATTCGATTTTATGTCCTGGAGATGTGATTTGAATG	
Consensus	(981)	A AA T C A TATCCA TT TTCT A TT TGT T G A TGAT T AATG	
		1051	
humPMS2	(1007)	TTACTCCAGATAAAAGGCAATTGCTACAAAGGGAAAACCTTTGTTGGCACTTTAAAGACCTCTTT	1120
AtPMS2	(935)	TCAGGCCGATAAAAGAAAGGTGTTCTTCTGACGAGA-CTTCGTTATCGGTT-----CTTT	
Consensus	(1051)	T AC CC GATAAAAG A T TT T GA GA A CTT TGTT C GTT	
		1121	
		1190	

Figure 1A

humPMS2	(1077)	GATAGGAATGTTGATAGTGTCAACAAAGCTAAATGTCACCTAGCACCCTACTGCTGATGTTGAAGGT
AtPMS2	(993)	GAG-GGAAGGGTGTGA-----A-CGAGATATATTCC-----T-----CCAGTAATGCGCTTATA-----
Consensus	(1121)	GA GGAA GT TGA A C AG TA AT C T CCA T TG T TT A
	1191	1260
humPMS2	(1147)	AACTTAAATAAAATGTCATCGAGCGGATTGGAAAGCCCATGGTAGAAAGCAGGATCAATCCCCTTCAT
AtPMS2	(1040)	-----TTGTTAAATAGGTTCCAGGAGAATTGGAGAACCT-----AGATAG-----GCTGGAGTTGTCGT
Consensus	(1191)	T T AA A G G G G ATT GGA A CC AGA AAG G T A C TC T
	1261	1330
humPMS2	(1217)	TAAGGACTGAGAAGAAAAGAACGCTGTCACATTCCAGACTGCGAGAGGCCTTTCCTCTTCGTCACAC
AtPMS2	(1097)	TC-----AGAAGAAAATCAA-----TCTTTGTCAGAAAGGATAG-----TTCTGGATGTCAGTT
Consensus	(1261)	T AGAAGAAA AAA TC TT CAGA G GA AG TTCT GTCA
	1331	1400
humPMS2	(1287)	AACAGACAAACAGCTCACAGCCCAGAACAGCTCCAGAACCCAGAGGAGCCCTCTAGGACAGAAAGGGGT
AtPMS2	(1148)	CTAA-----AACAAAGACT-----AGGGGAAGCTATTGAGAAAGAAATCCATCCTTAAGGGAGGTTGAATTGAA
Consensus	(1331)	A ACAAG CT AG AA T AGAA AA A A CC T GGA AA G
	1401	1470
humPMS2	(1357)	ATGCTGCTTCTAGCACTTCAGGGGCCATCTGCAAAAGGGCTCCTGAGACCTCAGAAAGAGGAGTGA
AtPMS2	(1212)	TAATAGTTCGCCAATGGAGAAGTTAAGTTGAGATCAAGGCCATG-TGGACGAAGAAAGGGGAAG-----
Consensus	(1401)	GT C A AG T T T GA AAGC T TG GAC AGAAAG GG AG
	1471	1540
humPMS2	(1427)	GTTCAGTCACGGACCCAGTGCACCTACGGCACACGGCGAGCTGGAGAACGACTCGGGGCACCCAGCAC
AtPMS2	(1277)	GTTC-----TTAT-----CAGT-----CCAT-----GATGTAACTCACCTGTACAAAGACACACTAGCAAACTGTTGC
Consensus	(1471)	GTTC T A CAGT CC GA A C A T GA AAG AC C GCA G C
	1541	1610
humPMS2	(1497)	TTCCCGTGGATTCTGAGGGGTTTCAGCATCCCAGACACGGGCAGCACTGCAGCAGCGAGTATGCGGCCAGC
AtPMS2	(1334)	CTCAGTAAATGTCAGT-----AGA-----AACTACTGATGCA-----AGTA-----AAG
Consensus	(1541)	TC GT A T TGA G AGA AGT ACTG GCA AGTA A
	1611	1680
humPMS2	(1567)	TCCCCAGGGGACAGGGGCTCGCAGGAAACATGTGACTCTCAGGAGAAAGCGCCTGAAACTGACCACTCTT
AtPMS2	(1376)	ACTTCAAG-----CAGCCGCT-----A-GCTTGGCGAGTC-----ACTT-----TGAATACTTTT
Consensus	(1611)	C AG CAG GCTC A T TG C TCA CT TGA ACT TT
	1681	1750
humPMS2	(1637)	TTTCAGATGTCAGTGCCTTCACCAACAGGAAGATACCGGATGAAATTTCGAGTTTGCCTTCAGCAAC
AtPMS2	(1423)	TTTACCATGGG-----AAA-----AAGAAAC-----ATGAAAA-----CATAAGC-----AC
Consensus	(1681)	TT ATG G AAA AAGA A C ATG AAA CT T AGC AC
	1751	1820
humPMS2	(1707)	TTATCTCGAACCCCCAACACAAAGCTTTTAAAGAACAAATCTTCCAGTTCTGACATTGCTCAA
AtPMS2	(1461)	CATCCTCTCTG-----AAACACT-----GTCCTCAACACCA-----AATCTCT-----AGTTAT-----CGTGCGAGA
Consensus	(1751)	A CTC C AAACAC GT T A AAA A AA TTCT AGTT T C T TG A
	1821	1890
humPMS2	(1777)	AAGTTAGTAAATCTCAGGACATGTCAGCCTCTCAGGTTGATGTAAGCTGTGAAATTAATAAGAAAGTTG
AtPMS2	(1517)	AA-----AGCAAAATTGAAAGTTGCGC-----CTAGCTTC-----AGGTGT-----CTCGT-----GAAAGGCG
Consensus	(1821)	AA AG AAAT AG C TG CT AG TT A AG TGT T T G AAG G
	1891	1960
humPMS2	(1847)	TGCCCTCGACTTTCTATGACTTCTTAGCTAACGAATAAACCACTGATCATCATCAAGCACAGCAAG
AtPMS2	(1568)	ATCAACTTGA-----TGATATG-----TCATCTCAAG-----GAAGATATGACACCAAGCG-----AAAG
Consensus	(1891)	C CT GA T TATG G T A CT AA G G AG TA CA AAGC AAAG
	1961	2030
humPMS2	(1917)	TGAAGGGGAACAGAAATTACAGGAAGCTTAGGGCAAAGATTTCTCTGGAGAAATCAAGCAGCCAAAGAT
AtPMS2	(1620)	AGATTCTGAAC-----AGGCAATC-----G-----GATTTCTCTGGAAAC-----CAAGCTGATAATGTT
Consensus	(1961)	GA GAAC AGG A T G GATTT TCCTGG A A CAAGC G A G T
	2031	2100
humPMS2	(1987)	GAACTAAGAAAGAGATAAGTAAAGCAGTGGTTGCAGAAATGGAATCATGCTCAGTTAACCTGGGAT
AtPMS2	(1672)	GAA-----AGCACTGAGAGA-----GTA-----CT-----TCGGGCAATTCAATCTGGGT
Consensus	(2031)	GAA AGA A GAGA A GTA C T GG CA TT AA CT GG T
	2101	2170
humPMS2	(2057)	TTATAATAACCAACCTGAACTGAGGATACTTCATAGTGGACCAGCATGCACGGACGAGAAAGTAAACTT
AtPMS2	(1712)	TCATCATTGCAAAATGGAAGCGAGATCTGTTCATGTGAGATCAGCATGCAGGTGATGAGAAATTCACATT
Consensus	(2101)	T T AT C AAA TG A GAT T TTCAT GTGGA CAGCATGC C GA GAGAA T AACTT
	2171	2240
humPMS2	(2127)	CGAG-ATGCTGCAGCAGCACCCGTGTCCTCAGGGCAGAGGCTCATAGCA-CCTCAGACTCTCAACTTAA
AtPMS2	(1782)	CGAACATTAGCAAGGTCA-ACTGTCTGAAACCAACCA-ACCCCTACTCCTAGCCTTTGAACCTGGAACTCT
Consensus	(2171)	CGA AT GCA CA AC GT CT A GCA A CT A CA CCT GA T A T
	2241	2310
humPMS2	(2195)	CTGCTTTAATGAAAGCTGTCGATAGAAATCTGGAAATATTAGAAACATGGCTTTGATTCTTAT
AtPMS2	(1850)	CTCCAGAACAGAAAGTAACGTGTTAATGCACATGGATATTACAGGGAAATGGCTTTCTCTACAGGA
Consensus	(2241)	CT C G A GAAG T TG TA A TGGA AT T AG A AATGGCTTT T T G
	2311	2380

Figure 1B

humPMS2	(2265)	CGATGAAAATGCTCCAGTCACGAAAGGGCT	--AAACTGATTTCTTGCACACTAAAGACTGGACCT
AtPMS2	(1920)	GAATCCAAGTGCTCC	--TCCCGAAAAACACTTGTAGACTACGAGCCATCCTTATAGAAATACACCT
Consensus	(2311)	AT AA TGCTCC TC C GAAA CT A ACT	CC T CC TAG AA AA ACCT
	2381		2450
humPMS2	(2333)	T CGGACCCAGGAGCC	CGATGAACTGATCTTCATGCTGACGCCCTGGGG-----TCATGTCGCCGG
AtPMS2	(1988)	TTGGAGTCGAAAGATCT	TAAGAACCTGTATCTCAACTCTAGGAGATAACCATGGGAAATGTTGGGTGCTAG
Consensus	(2381)	T GGA C A GA T A GA CTGATCT	A CT G GA A CC TGGGG TC TGC G
	2451		2520
humPMS2	(2398)	-----	CCTTCGGAGTCAGACAGATGTTGCCCTCAAGAGCC
AtPMS2	(2058)	TAGCTACAAAACCAGCAAAACAGATTGATTTGT	CCAFCAAGGTCCGTCAATGCTAGCATCCAGAGCA
Consensus	(2451)		CC TC CGAGTC ATG T GC TCC GAGC
	2521		259
humPMS2	(2434)	TGCCGGAAGTCGGTGATGATTGGACTGCT	CTTAACACAAAGGAGATCAAGAAACGATCACCACATGG
AtPMS2	(2128)	TGCAAGATCATCTGTATGATCGGAGATCCACTCGA	AAAGCGAAATCGAGAAAGATAGAGAACACTTGG
Consensus	(2521)	TGC G TC GTGATGAT GG	T C CT A A AA CGA ATG AGAA T T CAC TGG
	2591		2660
humPMS2	(2504)	GGGAGATGGACCACCC	TGGAAACTGTCCTCCATGGAAAGGCCAACCATGACACACATCCCCAACCTGGGTGT
AtPMS2	(2198)	CAGATCTCAATCT	CGCTGGAAATGCCACAGGACGCCAACATGCTCATCTGTGGACTTGACAA-
Consensus	(2591)	GA T GA CC TGGAA TG CC CA GGA G CCAAC ATG G CA T G AC TG	
	2661		2730
humPMS2	(2574)	CATTTCTCGAAC	-----
AtPMS2	(2267)	CTTTACTCACTTACCTGATGACGACATGTCAATGATGATGATGATGATGCAACCATCTATTGGC	
Consensus	(2661)	C TT CTCA A	
	2731		
humPMS2	(2587)	----	
AtPMS2	(2337)	ATGA	
Consensus	(2731)		

Figure 1C